CLAIMS

1- A molecule comprising three segments :

- a targeting segment C capable of binding to the membranes of cells engaged in an apoptosis process ;
- a therapeutic segment A comprising a biologically active compound ; and
- a linker segment L between the targeting segment and the therapeutic segment, said linker segment L being cleavable in vivo in the environment of a tissue or of a cell in apoptosis.

2- The molecule according to claim 1, wherein said linker segment L comprises a chemical function recognised and cleaved by an enzyme or a set of enzymes specific to the environment of the targeted cells.

3- The molecule according to claim 1 or 2, wherein said linker segment L comprises a sequence recognised and cleaved by a protease present by majority in the targeted tissue, more particularly selected from a metalloprotease of the extracellular matrix, a urokinase, and a protease specific to the cleaving of the extracellular segment of the membranous cytokines or of their receptors.

4- The molecule according to any of claims 1 to 3, wherein said linker segment L comprises a sequence selected in that it contains at least one B1-B2 residue couple given in the following table :

B_1	B_2
Val/Ala/Leu/Met	X
Leu/Tyr/Phe	X
Ala	Leu
Leu	Val
Val	Cys
Gly	Leu/Ile

Gly	Val
Ala	Val
Asn	Val
Arg	Phe
Gly/Ala/Asn/Glu/Gln/Pro/Arg/His/Asn	Hydrophobes, natural or not
Polar : Arg/Asp/Glu/Gln/Thr/Asn Hydrophobe : Ala	Hydrophobes, natural or not

wherein X is any amino acid residue, natural or not.

5- The molecule according to any of the preceding claims, wherein said targeting segment C is capable of binding to the membranes comprising lipids, the total electrostatic charge of which is negative, in particular phosphatidylserine.

6- The molecule according to any of the preceding claims, wherein said targeting segment comprises the following peptidic sequence :

J^1-J^2-J^3-J^4-J^5-J^6-Z^7-U^8-J^9-J^{10}-U^{11}-R-J^{13}-J^{14}-U^{15}-K-G-X^{18}-G-T-J^{21}-E-J^{23}-J^{24}-U^{25}-J^{26}-J^{27}-J^{28}-U^{29}-J^{30}-J^{31}-R-J^{33}-J^{34}-J^{35}-J^{36}-B^{37}-J^{38}-J^{39}-U^{40}-J^{41}-J^{42}-J^{43}-U^{44}-J^{45}-J^{46}-J^{47}-J^{48}-J^{49}-R-J^{51}-U^{52}-J^{53}-J^{54}-D-U^{56}-K-S-Z^{59}-L-J^{61}-J^{62}-J^{63}-J^{64}-Z^{65}-J^{66}-J^{67}-U^{68}-J^{69}-J^{70}-J^{71}-U^{72}-J^{73}-J^{74}-J^{75}-J^{76}

(S1)

wherein J, Z, U, X, and B represent amino acids such that :

- the J amino acids are selected independently of one another from the natural amino acids, or from derivatives thereof, such that at least 50 % of them are polar residues selected from R, N, D, C, Q, E, G, H, K, Orn, P, S, T and Y,
- the U amino acids are selected from A, C, G, I, L, M, F, W, Y, and V,
- amino acid X^{18} is selected independently of the other amino acids of the sequence from A, N, C, Q, G, H, I, L, M, F, S, T, W, Y and V,
- amino acid B^{37} is selected independently of the other amino acids of the sequence from R, A, C, G, I, L, M, F, W, Y, and V,
- amino acid Z^7 is selected independently of the other amino acids of the sequence from D and E,
- amino acids Z^{59} and Z^{65} are selected independently from E, D, K, and R,

the exponents indicating the position of the amino acids in the sequence.

7- The molecule according to claim 6, wherein amino acids U and B are selected according to one of the examples given below :

	U^{8}	U^{11}	U^{15}	U^{25}	U^{29}	B^{37}	U^{40}	U^{44}	U^{52}	U^{56}	U^{68}	U^{72}
Ex 1	V	L	M	I	L	R	I	Y	L	L	V	L
Ex 2	A	I	I	I	L	R	I	Y	L	L	I	L
Ex 3	A	I	I	I	L	R	I	Y	L	L	M	V
Ex 4	A	L	M	L	L	R	I	Y	L	L	I	M
Ex 5	A	L	M	I	I	R	V	Y	L	L	I	M
Ex 6	A	L	M	I	I	R	I	F	L	L	I	M
Ex 7	A	L	M	I	V	R	I	F	L	L	I	F
Ex 8	V	L	M	I	L	R	I	F	L	L	I	M
Ex 9	A	L	M	I	L	R	I	F	L	L	I	M
Ex10	A	L	M	I	L	R	I	Y	L	L	A	A
Ex11	V	L	M	I	L	R	I	Y	L	L	V	L
Ex12	V	L	M	I	L	R	I	F	L	L	V	L

8- The molecule according to any of the preceding claims, wherein said targeting segment C comprises a sequence selected from the group consisting of sequences SEQ ID Nos 23-32.

9- The molecule according to any of claims 1-5, wherein said targeting segment C comprises the sequence of all or part of an annexin, of a C1 or C2 type domain of the blood coagulation factors, of a domain V of a protein of the family of 2-Glycoproteins-I, of a FYVE type domain, of a PH type domain, or a fragment or a derivative having at least 50 % of identity.

10- The molecule according to claim 9, wherein said targeting segment C comprises a sequence selected from sequences SEQ ID Nos 1-16 and 17-22, preferably SEQ ID Nos 2-4, 6-8, 10-12, 14-16 and 19-22 or a fragment thereof.

11- The molecule according to any of the preceding claims, wherein said therapeutic segment A has anti-tumoral activity.

12- The molecule according to claim 11, wherein said therapeutic segment A is selected from the group consisting of a molecule of the family of TNFα or derivatives thereof (TRAIL-Do), a human IL4 molecule or one of its isoforms, a molecule of the family of

anthracyclines or one of its active derivatives, preferably doxorubicin, a taxane molecule such as paclitaxel or docetaxel or one of its active derivatives, a methotrexate molecule or one of its active derivatives, 2-methoxyestradiol or one of its active derivatives, molecules of the family of antipyrimidines such as cytosine arabinoside or difluorodesoxycytidine or one of their active derivatives, molecules of the family of alkylating agents derived from nitrogen mustards such as phenylalanine mustard (Melphalan) or a derivative such as Chlorambucyl.

13- The molecule according to any of claims 1-10, wherein said therapeutic segment A has anti-inflammatory activity.

14- The molecule according to claim 13, wherein said therapeutic segment A is selected from the group consisting of an N-terminal segment of human annexin I, in particular NTA1, anti-inflammatory cytokines, and in particular IL10 and IL13 or one of their appropriate mutants, the non-activating inhibitors of the membranous receptors of pro-inflammatory cytokines such as in particular the inhibitor of the IL1 receptor or an appropriate mutant of this inhibitor, glucocorticoids, non-steroid anti-inflammatories or their derivatives considered to be inhibitors of cylo-oxygenase enzymes 1 and 2, and Methotrexate, an inhibitor of the membranous receptors of the family of TNFR, in particular peptides containing at least the corresponding CRD1 extracellular domain.

15- A pharmaceutical composition comprising a molecule according to any of the preceding claims.

16- The use of a molecule according to any of claims 1-14 for manufacturing a medication.

17- The use of a molecule according to claim 11 or 12 for manufacturing a medication intended for cancer treatment.

18- The use of a molecule according to claim 13 or 14 for manufacturing a medication intended for the treatment of an inflammatory disease.